

Site Remediation and Waste Management Program Heating Oil Tank System Remediation Rules Presentation

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Welcome

- In-Person Attendees
- Webinar Attendees
- Peggy Cullen, EnviroPro Consultants
- George Guzdek, PG, Bison Environmental, LLC
- Gary Missigman, Powderhorn Agency





site remediation program

[njdep home](#)

What's New!

Updated "Capping of Volatile Contaminants for the Impact to Ground Water Pathway" guidance available

5 February 2019

Public Notification Requirements Updated

21 December 2018

December 12, 2018
CVP/SRAG Meeting

21 December 2018

Updated Historically Applied Pesticide Site Technical Guidance now available

12 December 2018

Correction to Technical Requirements for Site Remediation, N.J.A.C. 7:26E, Table 2-1, Footnote 3

5 December 2018

"Non-compliant underground storage

[SRP Contacts](#)[About SRP](#)[Contaminants of Emerging Concern](#)[Forms Library](#)[Guidance Library](#)[Home Heating Oil Cleanups/UHOT](#)[Listserv Archives](#)[Quick References Guide](#)[Rules](#)[SRP Data](#)[SRP Licensing Board](#)[Training](#)[- All Other Topics -](#)

Site Remediation Program

[May 2014 Remedial Investigation Deadline](#)[May 2014 Remedial Investigation Extension](#)[May 2014 Remedial Investigation Extension Reminders](#)

The Site Remediation Reform Act set forth sweeping changes to the way in which sites are remediated in New Jersey. SRRA established the affirmative obligation for responsible parties to remediate contaminated sites in a timely manner and created a category of remediation professionals known as Licensed Site Remediation professionals (LSRP). For more information, please see the [Overview of the LSRP Program](#).

May 7, 2012 is the day on which the phase-in period for implementing the [Site Remediation Reform Act, N.J.S.A. 58:10C-1 et seq.](#) (SRRA), and related amendments to the [Brownfield and Contaminated Sites Act](#) (Brownfield Act), the [Spill Compensation and Control Act](#), and the [Industrial Site Recovery Act](#) ended.

As of May 7, 2012, with limited exceptions, all remediations in the state of New Jersey, without regard to when remediation was initiated, are to proceed under the supervision of a Licensed Site Remediation Professional (LSRP), without New Jersey Department of Environmental Protection (Department) approval following the nine requirements set forth at [N.J.S.A.](#)



Site Remediation Program

[SRP Home](#) | [DEP Home](#)[Unregulated Heating Oil Tank Program \(UHOT\)](#) ▶ [Homeowner's Guide](#)

Homeowner's Guide to the Unregulated Heating Oil Tank Program (UHOT)

Introduction

The Unregulated Heating Oil Tank (UHOT) Program allows pre-qualified environmental professionals to investigate and remediate discharges from Unregulated Heating Oil Tanks, including all residential fuel oil underground storage tanks, with limited oversight by the New Jersey Department of Environmental Protection (NJDEP). All such tank cases are subject to possible audit by NJDEP. An unregulated heating oil tank is any size residential heating oil tank, or one or more heating oil tanks on the same non-residential property with an aggregate capacity of 2,000 gallons or less. An unregulated heating oil tank can be either an above ground or a below ground tank. Gasoline and diesel tanks are not unregulated heating oil tanks and are not included in the UHOT program.

Process [\(More Detailed Information\)](#)

A party remediating a qualifying unregulated heating oil tank may participate in the UHOT Program only **after** the remediation has been completed.

To pre-qualify to remediate Unregulated Heating Oil Tanks, environmental professionals must either be a:

1. Certified Subsurface Evaluator, in accordance with the Underground Storage Tanks rules, N.J.A.C. 7:14B, by:
 - a. Holding a valid New Jersey Underground Storage Tank (UST) certification in Subsurface Evaluation. This certification must be maintained in full force and effect. The loss or lapse of this certification shall be grounds for immediate removal from the UHOT Program; and
 - b. Being employed by a firm that holds a valid New Jersey UST certification in Subsurface Evaluation. This certification must be maintained in full force and effect. The loss or lapse of this certification shall be grounds for immediate removal from the UHOT Program. Or
2. Licensed Site Remediation Professional (LSRP), in accordance with the Regulations of the New Jersey Site Remediation Professional Licensing Board, N.J.A.C. 7:26I.

Note: A Licensed Site Remediation Professional (LSRP) can oversee the remediation of and issue a Response Action Outcome (RAO) for a UHOT if the UHOT is being remediated as part of an entire site RAO, if the UHOT is part of an Area Of Concern (AOC) RAO where more than one AOC has been remediated, or if the UHOT is being remediated at a site subject to the Industrial Site Recovery Act (N.J.S.A. 13:1K-6 et seq.). The remediation of all other UHOTs must be overseen by the NJDEP through

Related Links

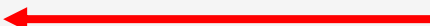
- ▶ [Open Public Records Act \(OPRA\)](#) - to get copies of reports and previously issued NFA letters
- ▶ [Petroleum Underground Storage Tank Remediation Upgrade and Closure Fund \(UST Fund\)](#) - for information on financial assistance
- ▶ [SRWMP DataMiner](#) - to find the status of the case and to find an environmental professional
- ▶ [Heating Oil Tank System Remediation Rules N.J.A.C. 7:26F](#)

Homeowners or other responsible parties may select any pre-qualified environmental professional listed as a certified Subsurface Evaluator or an LSRP. The directory for certified Subsurface Evaluators is now available under the Site Remediation category of [NJDEP's Data Miner](#) reports. Under the "Underground Storage Tanks" section, choose either "DEP certified UST Firms" for a complete list of all certified Subsurface Evaluators or "DEP Certified UST firms by County" for a list of certified Subsurface Evaluators located in the specific county selected. It is necessary to make sure that the firm is certified in Subsurface Evaluation in the "Cert Type" column on the right side of the report. The directory for LSRPs is also available under the Site Remediation category of [NJDEP's Data Miner](#). Under the "Licensed Site Remedial Professional Information" section, choose "Licensed Site Remedial Professional List" for a complete list of all LSRPs.

To obtain a No Further Action ("NFA") letter under the UHOT Program, a pre-qualified environmental professional or the homeowner shall submit the following to the NJDEP/Bureau of Case Assignment and Initial Notice:

1. A completed **Unregulated Heating Oil Tank (UHOT) System Remediation Form**.

(These forms replace the prior UHOT Questionnaire.)

- [Form](#) Version 1.4 - 10/23/2018 
- [Instructions](#) Version 1.4 - 10/23/2018
- [Update Log](#) Version 1.4 - 10/23/2018

2. A non-refundable check in the amount of \$400, payable to the "Treasurer, State of New Jersey"

3. A copy of all appropriate Remediation Documents prepared in accordance with the reporting requirements contained in [Heating Oil Tank System Remediation Rules](#) ("HOTS", N.J.A.C. 7:26F).

If an incident has been reported to the NJDEP since 2002, the status of the incident on a particular property can be determined via [NJDEP's Data Miner](#). Select "Search by Category," then select "Incident and Complaints" from the dropdown list and click on Submit. Searches can be performed by address in the report "Incidents by Address" to find the incident number if the incident number is not known or by incident number in the report "Incidents by Communications Center Number" if it is known. Note, the date range of the search may need to be changed when searching by address. The Program Interest Number (PI#) can be found in the report "Incidents by Communications Center Number" and should be noted for future reference.

If the status of the incident is "closed sent to UHOT" or "UHOT Central File" that means that a report has been submitted to the UHOT Program. The status of the case, including whether an NFA letter has been issued, can be determined using the PI number generated in the above report or using the site address, via [NJDEP's Data Miner](#). Select "Search by Site," change to the "ID" tab, and under "Search Criteria" change the Program to "Site Remediation." Type in the Program Interest number found above in the "ID" field, click the "Program Interest" radio button and click "Submit." When the site comes up, change the drop down on the right side of the report from "Case Tracking Tools" to "SRP Site Details," then click the green arrow. On the next screen, the "Document Status" column indicates whether the case is open or closed. If desired, click the blue link in the "More Info" column for more information.

To obtain a copy of a previously issued No Further Action letter or a copy of a report, contact NJDEP's Office of Records Access (OPRA) at: www.nj.gov/dep/opra/. Click "Submit an Online OPRA Records Request."

Click [here](#) if you have any questions about the Petroleum Underground Storage Tank Remediation Upgrade and Closure Fund.

Note:

The UHOT Program will accept sites (cases) which undergo all aspects of remediation (soil and ground water) on unregulated heating oil tanks. Some cases may be referred to other offices as detailed at: [UHOT Guidance](#).



Site Remediation Program

[SRP Home](#) | [DEP Home](#)[SRRA](#) ▶ Forms

Site Remediation Reform Act (SRRA) Forms

The Site Remediation and Waste Management Program SRRA Forms Page has been redesigned into 3 sections 1) NJDEP Online Services, 2) Remedial Phase Reports, Receptor Evaluation and CEA Forms, and 3) General Forms. This change was made to consolidate forms for which an NJDEP Online Service is available and to consolidate the remedial phase reports and related forms that can utilize the new "Cover/Certification Form" when multiple reports are being submitted at the same time. In addition, the content and names of some forms have changed as described below in more detail.

NJDEP Online Forms: This section now contains all the forms that are available for submission using NJDEP Online.

The Remedial Investigation Report Online Service (RIR Online Service) is now available. The RIR Online Service requires the upload/attachment of the RIR, Electronic Data Deliverable and some limited paper forms. **IMPORTANT NOTE:** The files for upload should be ready on your computer prior to starting the RIR Online Service. Also, to avoid confusion when browsing and choosing a file to upload, use file names that are specific to the case. This should include the Program Interest Number, case name and type of document (i.e. 164220_CaseName_CEA). The RIR Online Service Instructions include a comprehensive list of items you need to have in order to complete the submission. The RIR Online Service can only be completed using Versions 1.2 or 1.3 of the Case Inventory Document (CID) which was made available on June 10, 2014.

Training was provided for the CID and RIR Online Service in April 2014, and can be reviewed on the Department website at [Online Services Handout](#) and [NJDEP Online Services and New Electronic Case Inventory Document Webinar](#).

Mandatory DEP Online Services: The Annual Remediation Fee Form and the LSRP Notification of Retention and Dismissal Form have been available as a DEP Online service since September 2012. Unless otherwise instructed by the Department, the use of these services became mandatory on January 18, 2013. The Remedial Investigation Report became mandatory on April 3, 2016.

Remedial Phase Report, Receptor Evaluation and CEA Forms: This section consolidates the remedial phase report forms and common form submittals that accompany the remedial phase reports. The common information fields of these forms have been moved to a new "Cover/Certification Form" to eliminate redundancy when submitting multiple remedial phase forms at one time. Instructions for completing this form accompany this new form on the Forms Page.

General: This section contains the remainder of the forms which do not fit into the above two sections.

In addition, several forms have been renamed as follows:

- Name and Address Change Reporting Form is now "Site and Contact Information Update Form";



Related Links

- ▶ [Application for LSRP](#)
- ▶ [SRRA Guidance](#)
- ▶ [Technical Consultation](#) Posted 16 August 2010
- ▶ [Unregulated Heating Oil Tank \(UHOT\) System Remediation Form](#) (replaces "Unregulated Heating Oil Tank Questionnaire")
- ▶ [RCRA, CERCLA, Federal Facilities, Traditional Oversight, and Direct Oversight](#)

Disclaimer

Users of this information should not consider these materials the sole source of information sufficient in itself to dictate any outcome or decision on the remediation of a contaminated site but should refer to the Department's rules and guidance provided on [SRRA](#).

Site Remediation Program

[SRP Home](#) | [DEP Home](#)[▶ Guidance Library](#)

Site Remediation Guidance Library

Types of Guidance

1. Technical Guidance

Developed using a Stakeholder Process

The Technical Guidance Documents Contained in this Section were developed using a [Stakeholder process](#). Click on the topics below for a brief description of the document content, a downloadable copy of the document, a response to significant comment (if available), and additional links to training opportunities. To view the Department's policy for varying from a rule and applying technical guidance, [click here](#).

1. [Analytical Methods](#)
2. [Attainment/Compliance](#)
3. [Capping of Sites Undergoing Remediation](#)
4. [Characterization of Contaminated Ground Water Discharge to Surface Water Technical Guidance](#)
5. [Commingled Plume Technical Guidance Document](#)
6. [Conceptual Site Model \(CSM\)](#)
7. [Ecological Evaluation Technical Guidance](#)
8. [Fill Material Guidance for SRP Sites](#) (Formerly "Alternative and Clean Fill Guidance for SRP Sites")
9. [Ground Water SI/RI/RA](#)
10. [Historic Fill Guidance](#)
11. [Historically Applied Pesticides](#)
12. [Immediate Environmental Concern \(IEC\)](#)
13. [In Situ Remediation: Design Considerations and Performance Monitoring Technical Guidance](#)
14. [Landfills Investigation Technical Guidance](#)



Types of Guidance

1. Technical Guidance
 - ▶ Developed using a Stakeholder Process
 - ▶ Developed prior to enactment of SRRA
2. Financial Guidance: Fee / Grant
3. Administrative Guidance
4. Permits

▶ **Guidance Archive Documents**

Click above to view Archived Guidance Documents

Related Links

Developed prior to enactment of SRRA

The Technical Guidance Documents contained in this section were developed by the NJDEP prior to enactment of SRRA, and without extensive Stakeholder input/review. The Department will seek stakeholder input in the future. Click on the topic for a downloadable copy of the document.

1. [Characterization of Concrete and Clean Material Certification](#)
2. [Coordination of NJDEP and USEPA PCB Remediation Policies](#)
3. [Extractable Petroleum Hydrocarbons Methodology Replacement of TPH Method 418.1 for the Site Remediation Program](#)
4. [Findings and Recommendations for the Remediation of Historic Pesticide Contamination \(March 1999; developed with stakeholder input\)](#)
5. [IEC-GAC POET Specifications](#)
6. [NJDEP Field Sampling Procedures Manual](#)
7. [Protocol for Addressing EPH Contamination](#)
8. [Sheen Remediation Guidance, February 2006](#)

2. Financial Guidance: Fee / Grant

1. [Cost Guidance](#)
2. [Fees/Oversight Cost Guidance Document](#)
3. [Hazardous Discharge Site Remediation Fund Application Guidance](#)
4. [Petroleum Underground Storage Tank Remediation Fund Application Guidance](#)
5. [Technical Assistance Grant \(TAG\) Application Instructions](#)
6. [Technical Assistance Grant \(TAG\) Cost Guide](#)
7. [Technical Assistance Grant \(TAG\) Guidance](#) (NOTE: This document was not in the original list, but it is an important part of our TAG guidance package.)
8. [Technical Assistance Grant \(TAG\) Project Summary Sheets](#)

3. Administrative Guidance

1. [Administrative Guidance for Addressing Unknown Off-Site Sources of Contamination](#) (Formerly "Administrative guidance for LSRPs and Subsurface Evaluators when encountering contamination that is suspected to be unrelated to a known discharge undergoing remediation")
2. [Administrative Guidance Regarding Compliance with Remedial Action Report Timeframes](#)
3. [Administrative Guidance Regarding Environmental Remediation Undertaken by the New Jersey Schools Development Authority](#)
4. [Analytical Method Certification Requirements for the Site Remediation Program](#)
5. [CEA Biennial Certification Compliance: Tools for Performing Well Search for CEA Biennial Certifications](#)
6. [CEA Guidance](#)



Site Remediation Program

► SRP Rules

SRP Rules

In New Jersey, [statutes](#) are implemented through rules that are codified in the New Jersey Administrative Code. DEP rules are codified in Title 7 of the Code.

The following list of rules contains links to "courtesy copies" of the documents, in PDF format, that can be accessed with a compatible software, such as the free reader available from [Adobe](#). To get official copies and the regulatory history of the rule, check the information about [how to get copies of the Department's rules](#). The statute(s) that a particular rule implements are listed under "Authority" on the front page of each rule. The [NJ Legislature Web](#) site offers New Jersey Statutes online. Select the link for Statutes on their Web site and use the site's lookup options.

The SRP Regulations

For other DEP Rules, see the [DEP Rules Page](#).

[N.J.A.C. 7:26F](#)

Heating Oil Tank System Remediation Rules ("HOTSR")

New Rule: August 6, 2018

Posted: September 10, 2018

Available variances (posted February 4, 2019)

- [Correction to N.J.A.C. 7:26E, Table 2-1, Footnote 3 and Heating Oil Tank System Remediation Rules, N.J.A.C. 7:26F, Table 2-1, Footnotes 4 and 5](#)

Look below in the "Previous Training Sessions" section for handouts and webinars. Some events may not be posted below.

Recent Training

- [Training on Regulatory and Guidance Updates](#) [Completed 12 December 2018]
- [LSRP Case Study Training - the Next Generation! - Rutgers, New Brunswick, NJ](#) [Held: October 24, 2018]
- [Data Miner and Confirmed Discharge Notice \(CDN\) and ISRA GIN Online Services](#) [Completed 20 March 2018]
- [ISRA, What Every Practitioner Needs to Know](#) [Completed 29 January 2018]
- [In Situ Remediation: Design Considerations and Performance Monitoring Technical Guidance Training](#) [Completed 14 November 2017]
- [Confirmed Discharge Notice \(CDN\) and ISRA General Information Notice \(GIN\) Online Services training](#) [Completed 18 October 2017]
- E-waste Amendment Public Information [Completed 10 July 2017]
- Commingled Plume Training [Completed 16 May 2017]
- Investigating Child Care Centers and Educational Facilities [Completed 1 March 2017]
- NJDEP Case Study Training for LSRPs [Completed 21 October 2016]

Previous Training Sessions

Topic	Agenda	Copy of Slides	Recorded Webinar
Alternative and Clean Fill Posted 2 December 2011	-	Introduction [pdf 19484 Kb] Alternative and Clean Fill [pdf 695 Kb]	Webinar
Analytical Methods Technical Guidance Posted 9 July 2014	Agenda [pdf 14 Kb]	Slides [pdf 1,222 Kb]	Webinar
Attainment and Compliance Posted 11 December 2012	Agenda [pdf 58 Kb]	Attainment Training [pdf 3,579 kb]	Webinar
Characterization of Contaminated Ground Water Discharge to Surface Water Posted 23 February 2016	Agenda	Slides [pdf 15 Mb] SERDP Passive Sampling Guidance (ER-201216) due out in mid-2016	Webinar

The Unregulated Heating Oil Tank (UHOT) Program

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SRWMP UHOT Program

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Program Authority and Current Rules

Underground Storage of Hazardous Substances Act and UST Rules (N.J.S.A. 58:10A-21, N.J.A.C. 7:14B-16.1)

- Individuals or business firms providing services for UHOTs must be certified:
 - Installation
 - Closure
 - Corrosion protection
 - Testing
 - Subsurface Evaluation (remediation)

Administrative Requirements for the Remediation of Contaminated Sites (N.J.A.C. 7:26C-4 and 13)

- Rules establishing fees and the general requirements for a person responsible for conducting the remediation of a UHOT system



What is a UHOT?



Above-ground tanks and underground tanks that contain heating oil for on-site consumption for:

- Residential use, regardless of tank size, or
- Non-residential use that have a capacity of 2,000 gallons or less; and
- Contain No. 2, 4 and 6 oil, and kerosene



What are the basics?

- A UHOT owner that intends to remove UHOT must hire a certified individual to do so (often occurs during real estate transactions)
- A call to the DEP HOTLINE is required when a discharge of heating oil to the environment is discovered
- The discharge must be remediated by a certified individual



What if there was no discharge?

- If there is no discharge to the environment from the UHOT, do not call the DEP HOTLINE
- The Department will not issue a UHOT No Further Action Letter (NFA) when there has been no discharge to the environment



Who is a Certified Individual?

A certified Subsurface Evaluator (SSE)

or

A Licensed Site Remediation Professional (LSRP)

- DEP issues UHOT NFA letter whether remediation is conducted by a SSE or an LSRP, with one exception...
- An LSRP may issue an Response Action Outcome (RAO) only when a UHOT is remediated as part of a larger site remediation



What happens after the remediation is done?

- The certified individual details the remediation in a UHOT remediation report
- The Department reviews to determine:

Was the remediation conducted in accordance with the Department's rules and guidance?

- If properly conducted, the Department will issue a UHOT NFA letter
- The NFA "closes out" the incident that was generated by the Hot Line call

Note: the NFA is specific to the UHOT remediation and does not address any other environmental issues at the site



DEP Review - What needs to be submitted?

1. A signed and certified UHOT System Remediation Form
2. Remediation reports prepared in accordance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E-5.7
3. A \$400 non-refundable check or money order, made payable to "Treasurer, State of New Jersey"



DEP's Administrative Process

Bureau of Case assignment and Initial Notice (BCAIN) conducts an administrative review and will verify information submitted

If the submittal is incorrect or incomplete:

- BCAIN holds the report
- Contacts the SSE or LSRP to correct the problem

Incorrect/Incomplete submittals will not be reviewed by UHOT staff

Incorrect/Incomplete submittals will not receive a UHOT NFA letter



Common Administrative Errors

- Incorrect address and/or block and lot
 - Use street address and municipality (not the mailing address)
 - Block and lot can change (please consult current tax database)
- Missing or incorrect DEP Incident Number
 - DEP generates this number from the Hot Line call
- \$400 check NOT included



DEP Conducts Audits

- Ensure compliance with DEP regulations and standards
- Triggered by anomalies on the UHOT form, or randomly, at DEP's discretion
- Desk Audits: review of remediation documents
- Field Audits: on-site inspections, independent sampling and analysis



UHOT Program Exceptions

- A UHOT case that has Immediate Environmental Concern (IEC) conditions will be handled by SRWMP's IEC Unit
 - IEC conditions include contamination resulting in exposure via Vapor Intrusion, Potable Water, Direct Contact
- SRWMP's Field Offices oversee UHOT cases requiring water discharge permits:
 - NJPDES Permits by Rule: discharge to Ground Water
 - On-Scene Coordinator Discharge Authority: discharge to Surface Water



How are small surface spills handled?

- Surface spills of less than 100 gallons of fuel oil should be called into the DEP HOTLINE
- These cases are referred to county/local health departments for them to “close”
- DEP will not issue NFA letters for these incidents



UST Fund Information

- For information or questions please contact the UST Fund at:
 - Phone: (609) 984-2076
 - Email: srp_ustfund_gg@dep.nj.gov
 - Web: <http://www.nj.gov/dep/srp/finance/ustfund/>



Erroneous Case Numbers

If a case number was issued in error

OR

after the case was called in, it was determined that there was no discharge from the tank, contact:

Kathy Rogacki

Bureau of Case Assignment and Initial Notice (BCAIN)

(609) 292-7253



Potable Well Submissions

When submitting data to be reviewed for a potable well that is located on-site, please submit a hard copy and an electronic copy of the full data deliverables package obtained from the laboratory

When testing is requested from the laboratory, please note the following:

- The laboratory must be certified by the NJDEP to test the parameters requested.
- For potable wells, volatiles can only be analyzed by USEPA Method 524.2.
- For base neutrals, the following methods can be used: SW-846 8270C or D, SW-846 8270C or D-SIM, USEPA Method 625, and USEPA Method 525.2.
- If an approved method is not used, the data will be rejected and resampling and analysis will be required.



Common Submittal Errors

- Potable Wells
- Two Foot Rule for Investigating Groundwater
- Fanny Mae Submissions
- Authorized Signatories

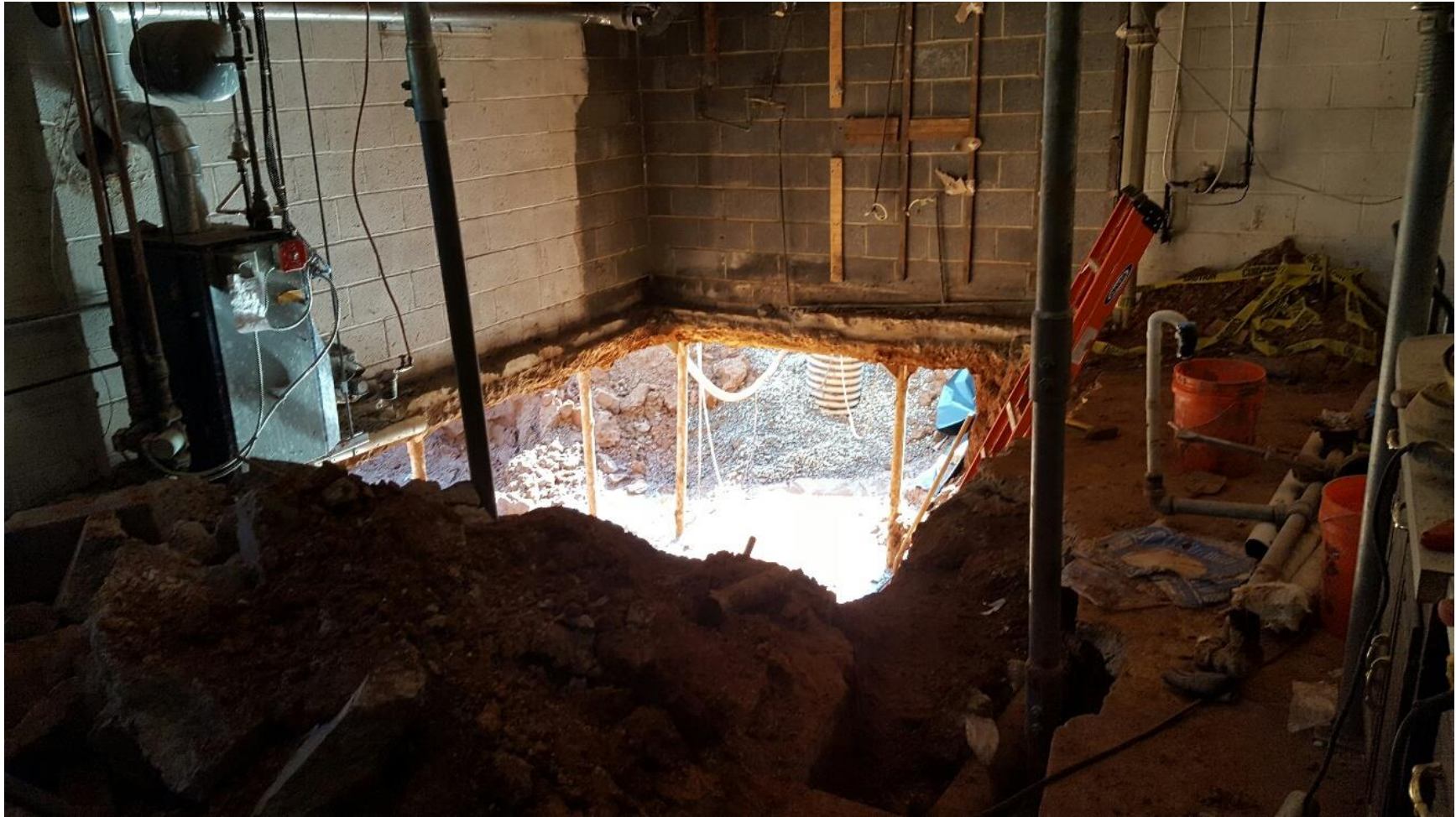


HOTS Remediation Rules

N.J.A.C. 7:26F







New UHOT Rules & Guidance

- As of August 6, 2018 the HOTS Remediation Rules N.J.A.C 7:26F is in full effect
- All remediations started after August 6, 2018 must comply with the new HOTS Remediation Rules N.J.A.C 7:26F
- Contains all of the administrative and technical requirements for UHOTs



What is different about the HOTS Remediation Rules?

- More prescriptive rules are aimed at consistency
- Focus is on more timely and less costly cleanups
- Includes detailed sampling and analytical requirements, and Extractable Petroleum Hydrocarbons (EPH) soil remediation criterion



What else is different about the HOTS Remediation Rules?

- Contains UHOT- specific regulatory timeframes
- Contains specific sampling requirements for both soil and groundwater
- More data required in applications for UST Fund grants and loans



What else is different about the HOTS Remediation Rules?

- No requirement to submit an LNAPL form
- No requirement to submit a Receptor Evaluation form
- Not subject to mandatory timeframes



****NEW**** **N.J.A.C. 7:26F**

4 Key Features:

- Prescriptiveness
- DEP-Issued HOTS No Further Action (NFA) Letter
- Heating Oil Tank System (HOTS) Remediation with Other Areas of Concern (AOCs)
- Residual Contamination – Three Options



****NEW** N.J.A.C. 7:26F**

Residual Contamination – 3 Options: Option 1: Traditional Deed Notice

- For both residential and non-residential properties
- Limited restricted or restricted use with Deed Notice and Soil Remediation Action Permit
- Only LSRPs (no Subsurface Evaluators)
- DEP will issue a Heating Oil Tank System No Further Action Letter (HOTS NFA)



****NEW**** N.J.A.C. 7:26F

Residual Contamination – 3 Options: Option 2: “Deed Notice Lite”

- For RESIDENTIAL properties only
- Contamination *may* remain only if no threat to public health and safety, or the environment
- Contamination *may* remain under a residential building, a paved area, or a capped easement (such as a sidewalk containing utilities), if removal is impractical or the contaminated soil is inaccessible
- Heating Oil Tank System (HOTS) Model Deed Notice



****NEW**** **N.J.A.C. 7:26F**

Residual Contamination – 3 Options: **Option 3: “Small Quantity Exception”**

- For RESIDENTIAL properties only
- Contamination *may* remain only if no threat to public health and safety, or the environment
- Allows less than 15 cubic yards of contaminated soil to remain under a residential building
- Requires DEP approval
- No Deed Notice is necessary



HOTS Field Audits

Conducted by Bureau of Field Operations (BFO)

The Audit Process

- Firms are selected randomly from the incident module
- BFO inspector contacts firm to obtain upcoming schedule
- Firm provides 3 WEEKS of their schedule to the inspector
- Average of 3 audits per firm for both closure & remediation
- Fieldwork can include independent sampling events for Soil/GW
- DEP requires ALL APPLICABLE CERTIFICATIONS to be available onsite
- BFO Inspector observes remedial activities & completes inspection report
- Copies of inspection reports can be requested by the contractor
- The BFO inspector should be notified of any schedule changes



HOTS Field Audits

Common Issues

- Sampling
- Certification
- Notification
- Health & Safety
- Local Inspection



HOTS Field Audits Certification Issues

Subsurface Evaluator (SSE)

- Required on site for remediation
- Required on site for all compliance sampling of water or soil – even if lab is collecting samples (Unless the sample locations were previously marked out by the SSE)
- If no SSE on site, LSRP must certify the Remedial Action Report as an LSRP (not as SSE)

Closure

- Firm must be certified for closure
- Individual onsite must ALSO be certified for closure
- Subcontractors with proper certification (for either Closure or SSE) considered to be from the same firm



DEP Hotline Notification Issues

- Call 1-800-WARNDEP immediately upon discovery of a discharge
- DO NOT WAIT
- DO NOT CALL IN CASE MORE THAN ONCE

There is no *de minimus* reporting quantity



Compliance Options for Soil Contamination

Important prerequisite for using compliance options:

Delineation, horizontal AND vertical, must be **complete** using single point compliance

Thus:

Compliance options are only allowed for the soil direct contact and IGW pathways in the remedial investigation (RI) and remedial action (RA) phases

when contaminant delineation is complete



Compliance Options for Soil Contamination

75 percent 10x procedure: After excavation, the contaminant concentration of at least 75% of the samples is below or equal to the remediation standard with no sample contaminant concentration in excess of 10x the remediation standard

Arithmetic mean (compliance averaging): Mean contaminant concentration is below or equal to the remediation standard



75/10x Option Details

What are the detailed requirements?

- Designed use: for evaluation of post-excavation samples
- Addresses residual levels of soil contamination after excavation
- Minimum number of samples based on volume of soil excavated
 - Up to 125 cubic yards: 8 samples
 - 126 to 3000 cubic yards: 12 samples
 - 3001+ cubic yards: additional 12 samples for each additional 3000 cubic yards



Arithmetic Mean (Compliance Averaging)

What are the detailed requirements?

- 9 or fewer total samples
- 2 or fewer “distinct” sample values
- “Distinct” means the samples do not have the same value
- Enter “0” for Non-detect results
- No excessive sampling



Questions ?



Case Scenarios

Question & Answer Session

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UHOT Scenarios

Scenario 1

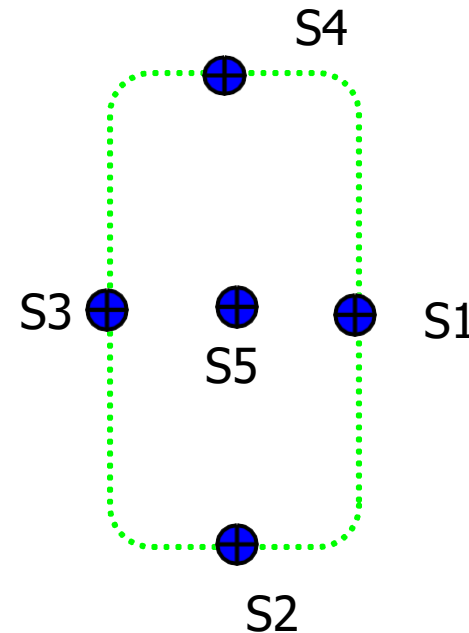
SCENARIO 1

- Excavation is 10' x 12' to 8' deep
- S5 EPH = 5,300 ppm
- S5 Contingents Pass
- S1 through S4 EPH are all less than 1,000
- EPH Average = 1,700 ppm

QUESTIONS

- 1). Can we request unrestricted use NFA using compliance averaging for EPH?
- 2). Do we have to delineate EPH at S5?

NOT TO SCALE



UHOT Scenarios

Scenario 1

QUESTIONS

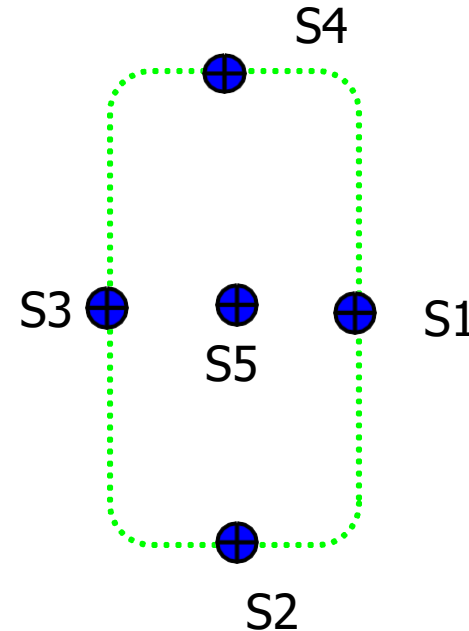
NOT TO SCALE

1). Can we request unrestricted use NFA using compliance averaging for EPH?

Not until S5 is vertically delineated.

2). Do we have to delineate EPH at S5?

Yes. Based upon the post-ex sample results, S5 is delineated horizontally, but requires vertical delineation.



UHOT Scenarios

Scenario 2

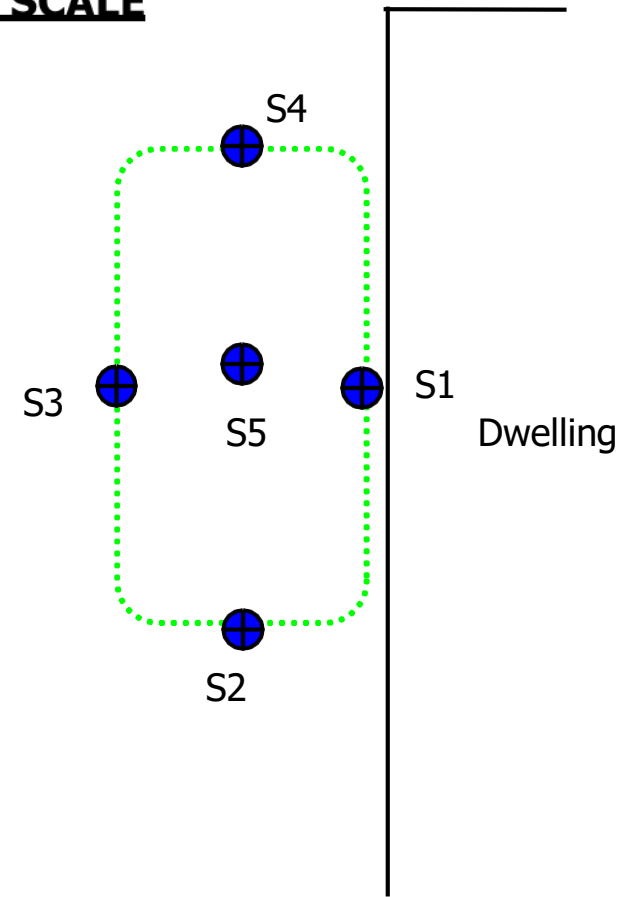
SCENARIO 2

- Excavation extends to dwelling and is 12' x 15' to 10' deep
- S1 EPH = 5,800 ppm
- S1 Naphthalene = 9 ppm
- S2 through S5 EPH is less than 100 ppm
- S2 through S5 Naphthalene was ND
- EPH Average = 1,200 ppm
- Naphthalene Average = 1.8 ppm

QUESTIONS

- 1). Can we request unrestricted use NFA using compliance averaging for EPH and Naphthalene?
- 2). Do we have to delineate EPH and/or naphthalene at S1?

NOT TO SCALE



UHOT Scenarios

Scenario 2

QUESTIONS

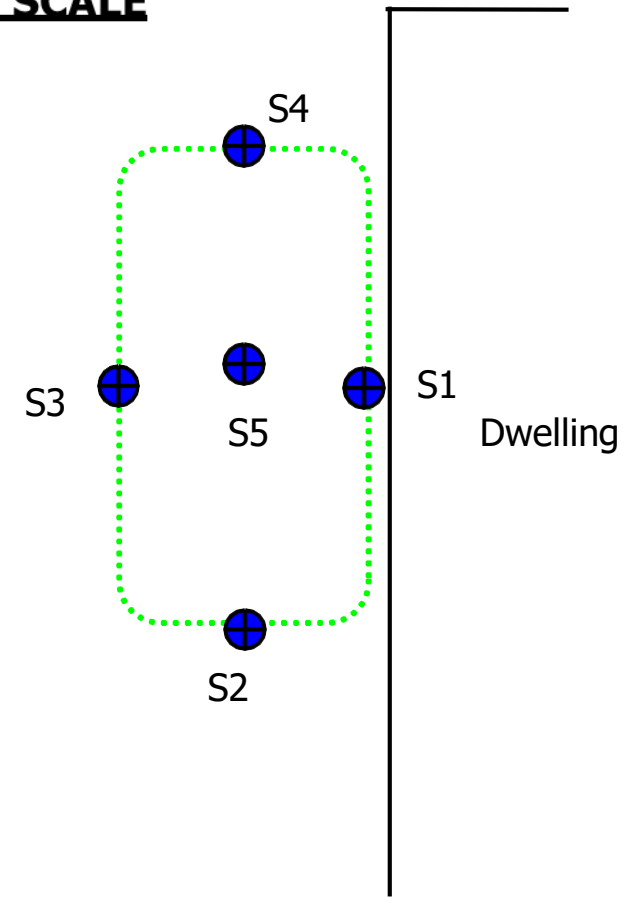
1). Can we request unrestricted use NFA using compliance averaging for EPH and Naphthalene?

Not without delineation for both contaminants at S1.

2). Do we have to delineate EPH and/or naphthalene at S1?

Yes.

NOT TO SCALE



UHOT Scenarios

Scenario 3

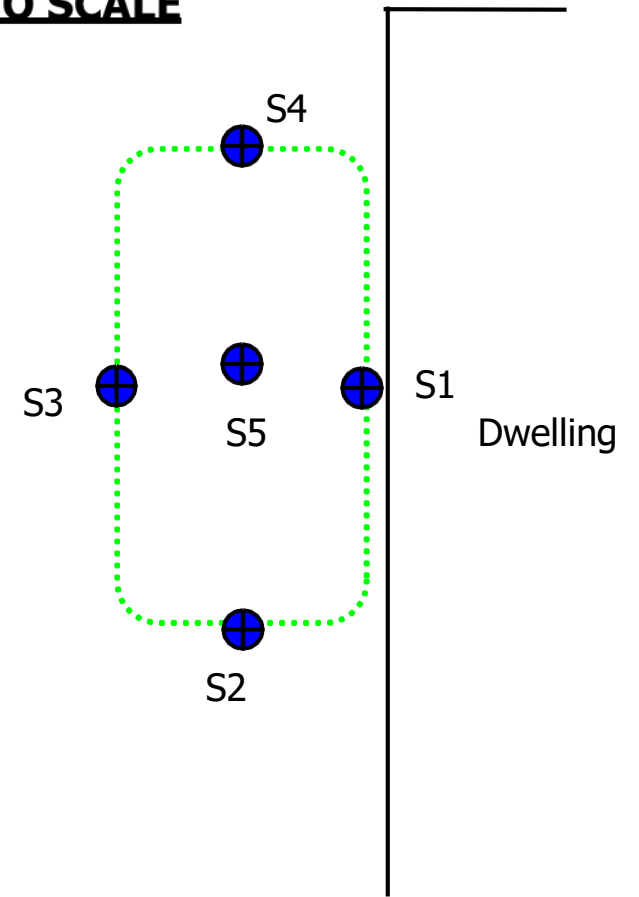
SCENARIO 3

- Excavation extends to dwelling and is 12' x 15' to 10' deep
- S1 EPH = 7,600 ppm
- S1 Naphthalene = 10 ppm
- S2 through S5 EPH Ranges Between 3,700 and 4,500 ppm
- S2 through S5 Naphthalene is 2 ppm or less
- EPH Average = 5,200 ppm
- Naphthalene Average = 3 ppm
- Physical constraints prevent removing additional soil
- Delineation of EPH around S1 shows volume of soil with EPH over 5,100 ppm is 12 yds³

QUESTIONS

- 1). Can we request unrestricted use NFA with de minimis quantity exception?
- 2). Do we have to delineate naphthalene at S1?

NOT TO SCALE



UHOT Scenarios

Scenario 3

QUESTIONS

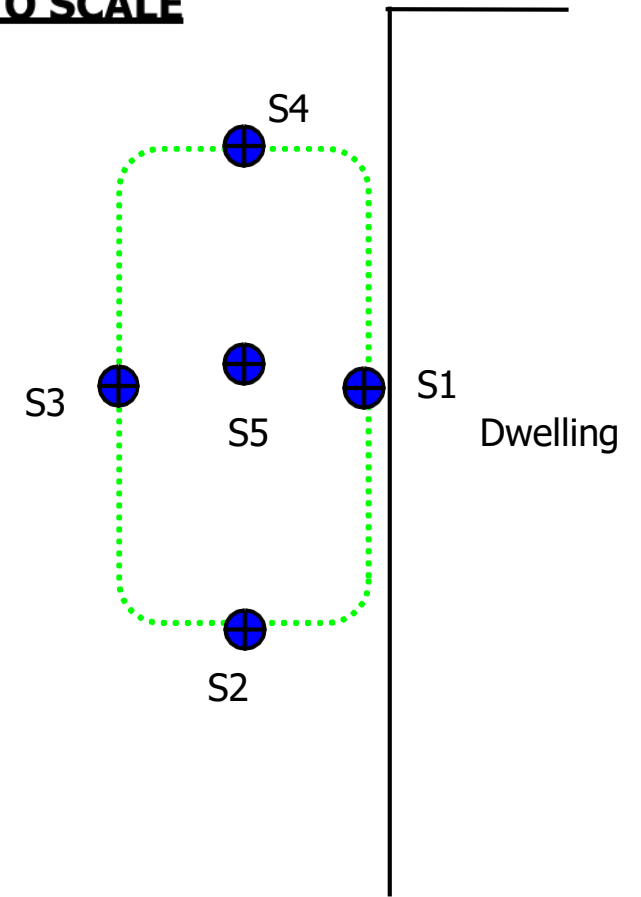
1). Can we request unrestricted use NFA with de minimis quantity exception?

No. Small quantity exception is only available if contamination is located under the residence.

2). Do we have to delineate naphthalene at S1?

Yes.

NOT TO SCALE



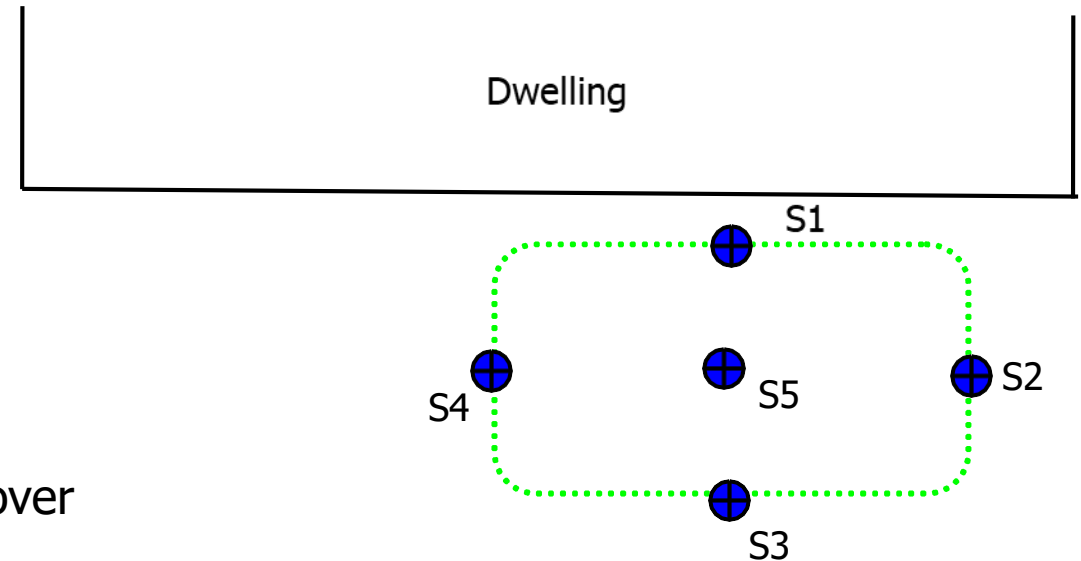
UHOT Scenarios

Scenario 4

SCENARIO 4

- Excavation extends to within 2 feet of dwelling
- Excavation is 12' x 15' to 12' deep
- Soil is sandy
- S1 EPH = 6,300 ppm
- S1 Contingents pass
- S2 through S5 EPH all less than 5,100 ppm
- EPH Average = 5,400 ppm
- Can't dig closer to house without supporting house
- Physical constraints prevent removing additional soil in other directions
- Delineation of EPH around S1 shows volume of soil with EPH over 5,100 ppm is 12 yds³

NOT TO SCALE



QUESTION

- 1). Can we request variance to request unrestricted use NFA with de minimis quantity exception?



UHOT Scenarios

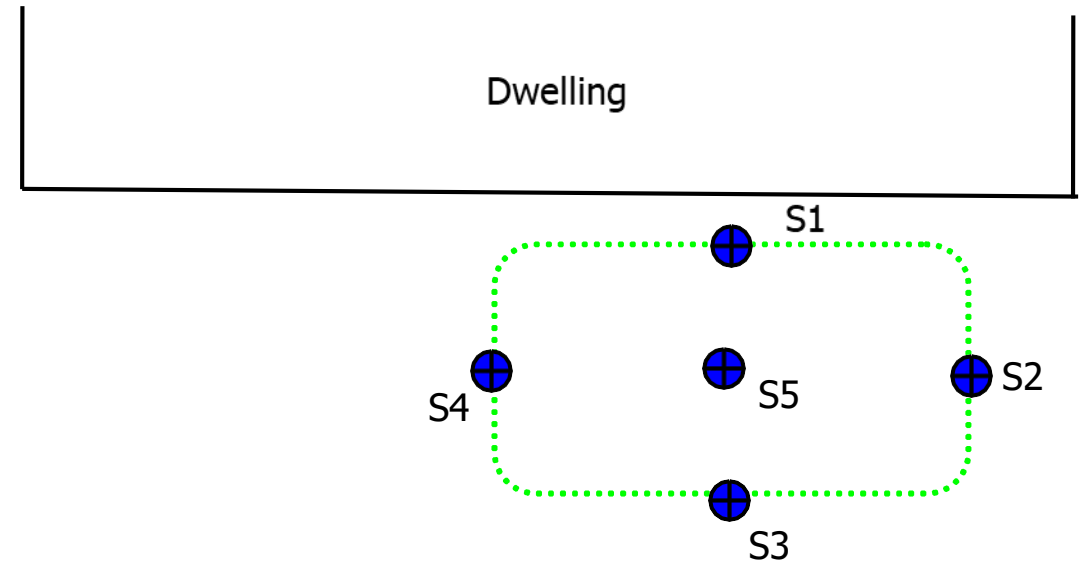
Scenario 4

QUESTION

1). Can we request variance to request unrestricted use NFA with de minimis quantity exception?

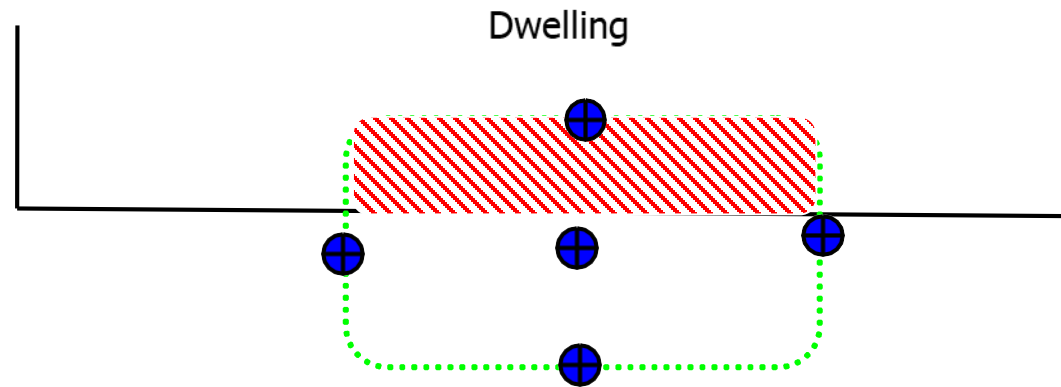
No. Small quantity exception is only available if contamination is under the building.

NOT TO SCALE



Small Quantity Exception

NOT TO SCALE



UHOT Scenarios

Scenario 5

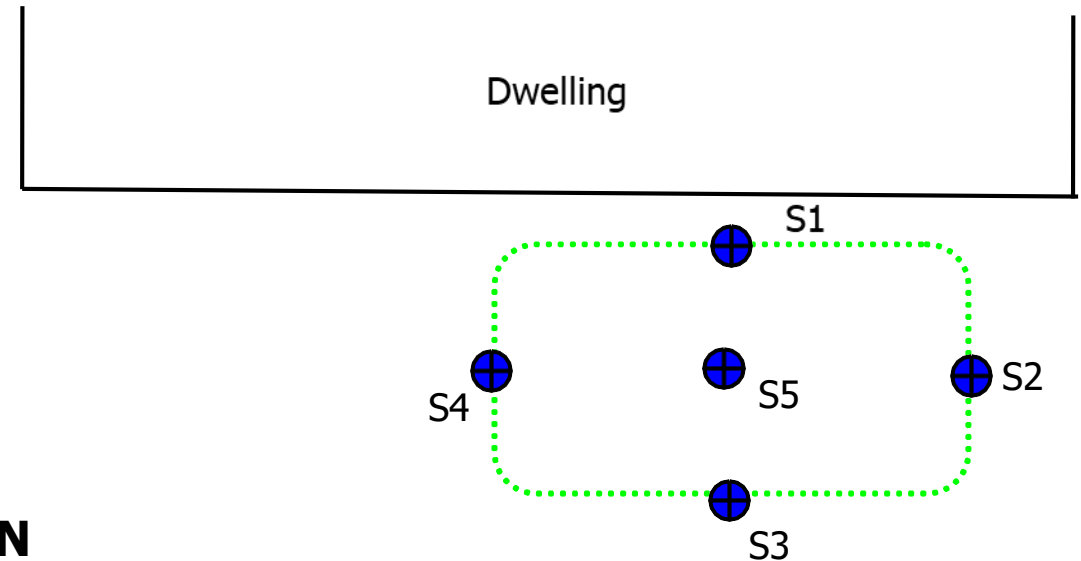
SCENARIO 5

- Excavation extends to within 2 feet of dwelling
- Excavation is 12' x 15' to 12' deep
- Soil is sandy
- S1 EPH = 6,300 ppm
- S1 Contingents pass
- S2 through S5 EPH all less than 5,100 ppm
- EPH Average = 5,400 ppm
- Can't dig closer to house without supporting house
- Excavation in other directions is possible

QUESTION

1). Can we dig out more soil in other directions until those locations have EPH concentrations low enough to bring average below 5,100 ppm and then request an unrestricted use NFA using compliance averaging?

NOT TO SCALE



UHOT Scenarios

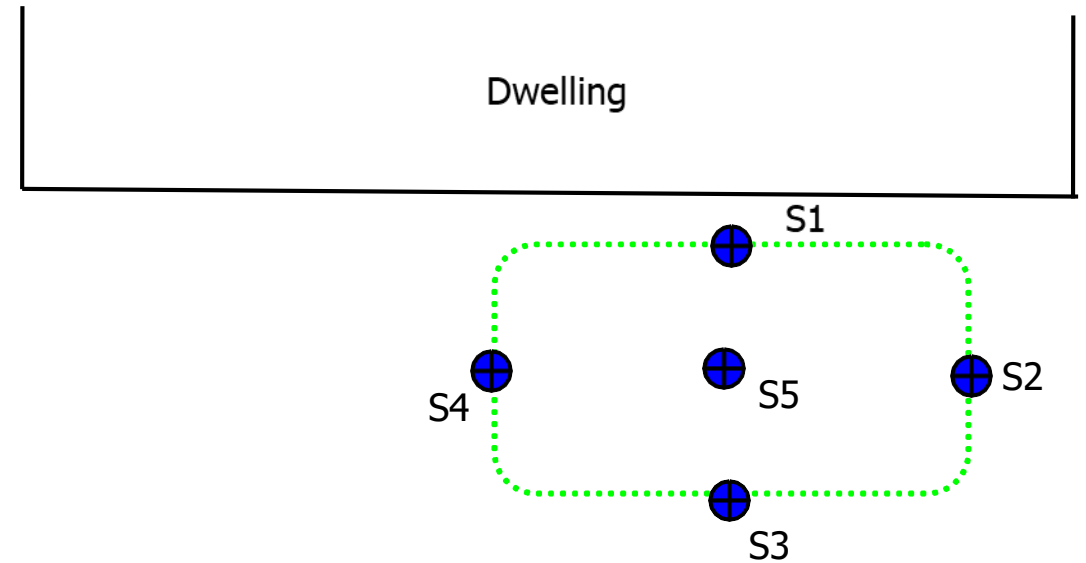
Scenario 5

QUESTION

1). Can we dig out more soil in other directions until those locations have EPH concentrations low enough to bring average below 5,100 ppm and then request an unrestricted use NFA using compliance averaging?

Yes.

NOT TO SCALE



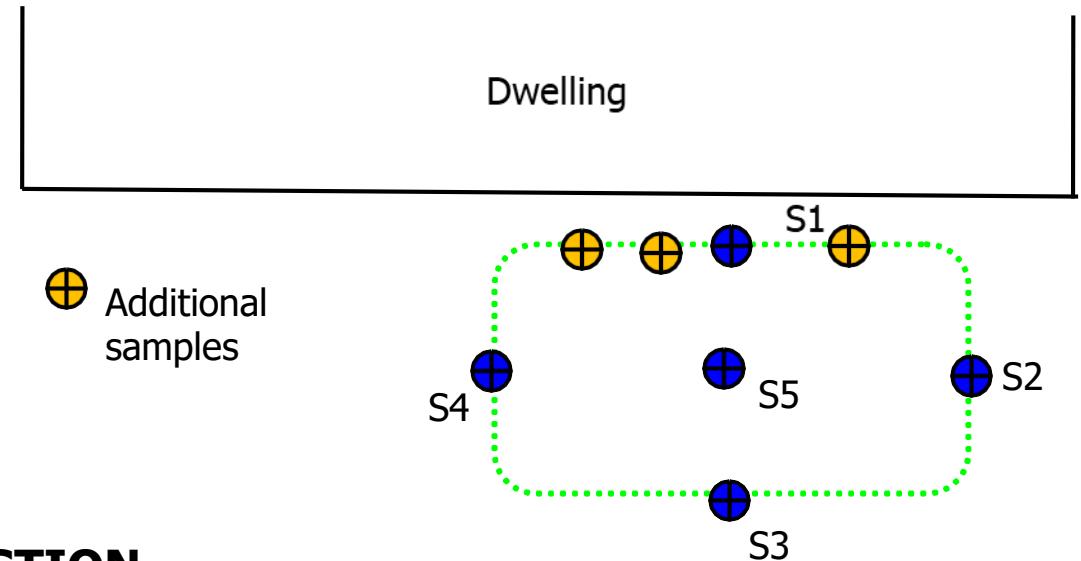
UHOT Scenarios

Scenario 6

SCENARIO 6

- Excavation extends to within 2 feet of dwelling
- Excavation is 12' x 15' to 12' deep
- Soil is sandy
- S1 EPH = 6,300 ppm
- S1 Contingents pass
- S2 through S5 EPH all less than 5,100 ppm
- EPH Average = 5,400 ppm
- Can't dig closer to house without supporting house
- Excavation in other directions is possible

NOT TO SCALE



QUESTION

1). If we collect the three additional samples shown and those EPH concentrations are low enough to bring EPH average below 5,100 ppm can we then request an unrestricted use NFA using compliance averaging?



UHOT Scenarios

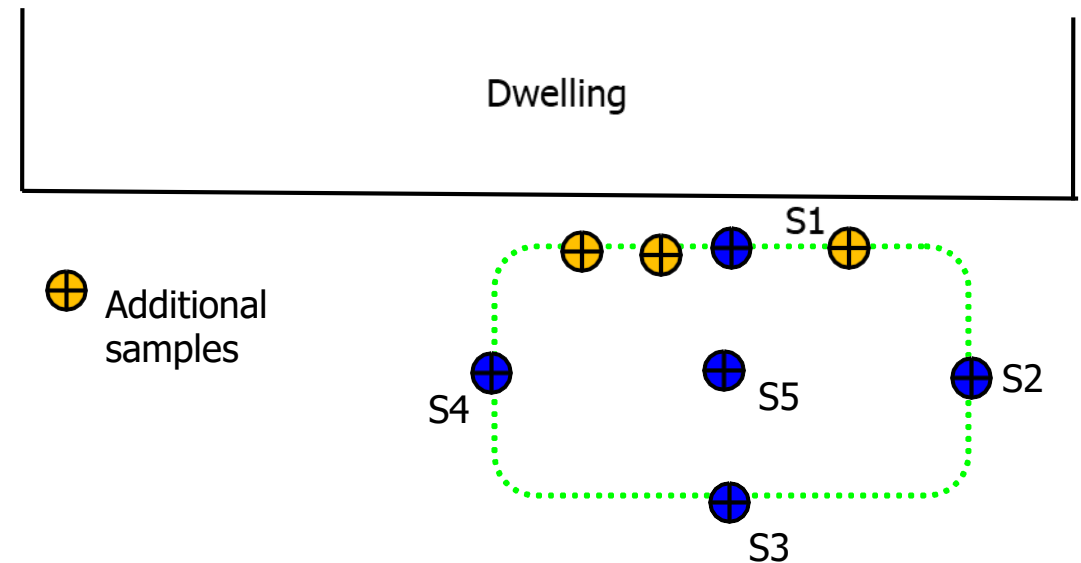
Scenario 6

QUESTION

1). If we collect the three additional samples shown and those EPH concentrations are low enough to bring EPH average below 5,100 ppm can we then request an unrestricted use NFA using compliance averaging?

No, the area around sample S1 was not delineated vertically or horizontally toward the dwelling.

NOT TO SCALE



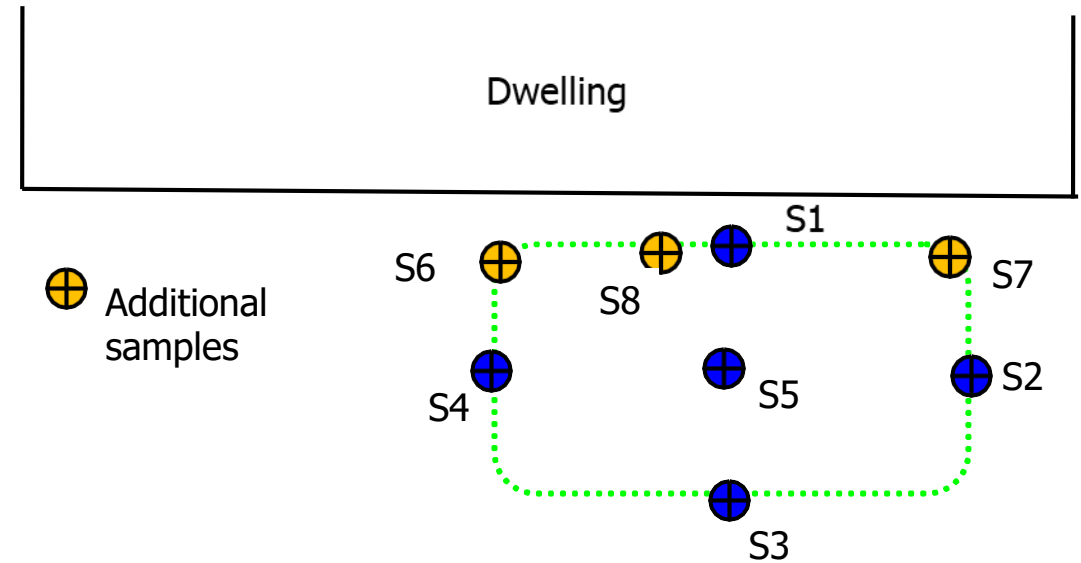
UHOT Scenarios

Scenario 7

SCENARIO 7 – 75%/10x

- Excavation extends to within 2 feet of dwelling
- Excavation is 12' x 15' to 12' deep
- Soil is sandy
- S1 EPH = 6,300 ppm
- S8 = 5,200 ppm
- S1 Contingents pass
- S2 through S7 EPH all less than 5,100 ppm
- EPH Average = 4,900 ppm
- Can't dig closer to house without supporting house
- Excavation in other directions is possible

NOT TO SCALE



UHOT Scenarios

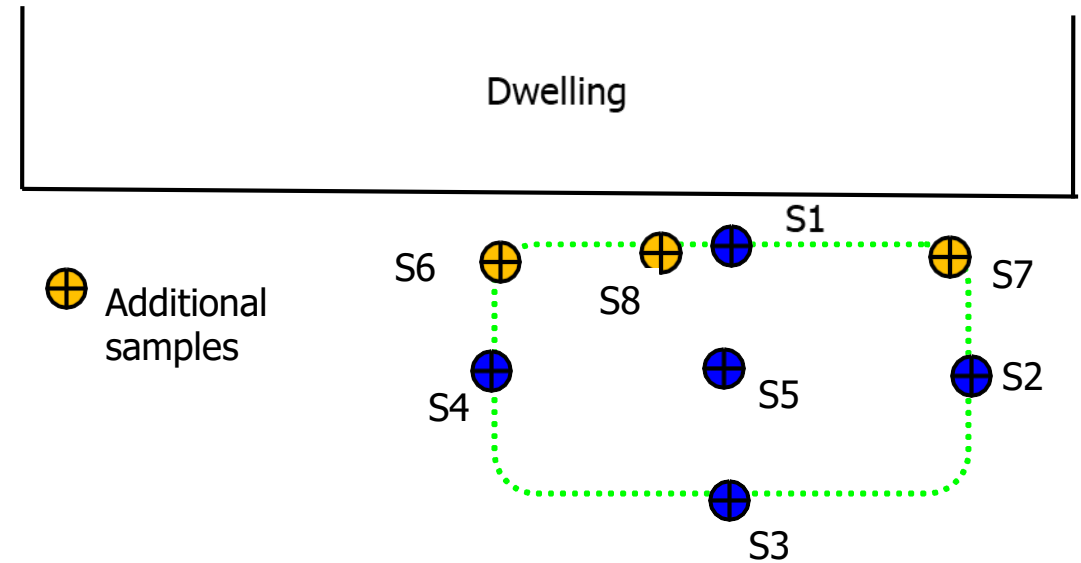
Scenario 7 (cont'd)

QUESTIONS

1) Can we request an unrestricted use NFA using 75/10 compliance averaging since 75% of the samples are below 5,100 ppm EPH and no sample is more than 10X the standard?

2) If we collect 8 samples for naphthalene and two are above 8 ppm and average is above 8 ppm but no sample is higher than 20 ppm can we request an unrestricted use NFA using the 75/10x compliance averaging since 75% of the samples are below the standard and none exceeded the standard by more than 10x?

NOT TO SCALE



UHOT Scenarios

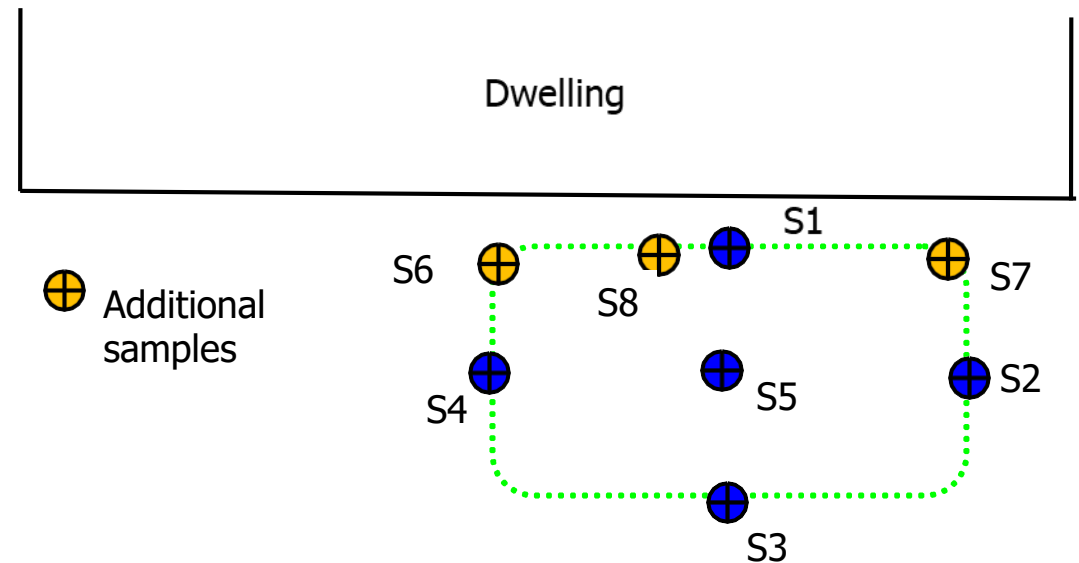
Scenario 7 (cont'd)

QUESTIONS

1) Can we request an unrestricted use NFA using 75/10 compliance averaging since 75% of the samples are below 5,100 ppm EPH and no sample is more than 10X the standard? **Not applicable for EPH.**

2) If we collect 8 samples for naphthalene and two are above 8 ppm and average is above 8 ppm but no sample is higher than 20 ppm can we request an unrestricted use NFA using the 75/10x compliance averaging since 75% of the samples are below the standard and none exceeded the standard by more than 10x? **Yes, as long as soil excavation was conducted (post remediation phase).**

NOT TO SCALE



General Questions and Clarifications

Compliance Averaging

1). Please confirm you do not need to request a variance to use compliance averaging.



General Questions and Clarifications

Compliance Averaging

1). Please confirm you do not need to request a variance to use compliance averaging.

Confirmed, you do NOT need a variance for compliance averaging.



General Questions and Clarifications

Deed Notice Light and De Minimis Exception

- 1) Please confirm that neither of these options can be used if EPH exceeds 8,100 ppm.
- 2) Can we request a variance to use either of these options if additional excavation would damage an expensive driveway or other structure such as a built-in swimming pool?



General Questions and Clarifications

Deed Notice Light and De Minimis Exception

1) Please confirm that neither of these options can be used if EPH exceeds 8,100 ppm.

Currently, the product limit is 8,000 mg/kg. Sample results cannot exceed the 8,000 mg/kg EPH level at this time.

2) Can we request a variance to use either of these options if additional excavation would damage an expensive driveway or other structure such as a built-in swimming pool?

This would need to be addressed on a case by case basis.



General Questions and Clarifications (cont'd)

UHOT Form

- 1) If using compliance averaging or requesting de minimis exception, in Section E do we check box for "Residual Contamination Remains and Supporting Information is Included"?
- 2) If using compliance averaging or requesting de minimis exception, in Section G #9 do we check the "No" box?



General Questions and Clarifications (cont'd)

UHOT Form

1) If using compliance averaging or requesting de minimis exception, in Section E do we check box for “Residual Contamination Remains and Supporting Information is Included”?

Yes, check the box for “Residual Contamination Remains and Supporting Information is Included” and supporting information for the remedial approach taken should be added to G4 (i.e., Deed Notice Light, Deed Notice or Small Quantity Exception).



General Questions and Clarifications (cont'd)

UHOT Form

2) UHOT Form Question G9: Were the analytical results for all soil post excavation/remediation samples below the NJDEP's most stringent Soil Remediation Standards and Screening Levels? If using compliance averaging or requesting de minimis exception, do we check the "No" box?

Yes, check the "no" box.



General Questions and Clarifications (cont'd)

Ground Water Sampling and Analysis

1). If a ground water temporary point or well must be placed in the excavation, is it necessary to purge the volume of the excavation if the fill below the water table was compacted in one-foot lifts and the fill was of equal or less permeability?



General Questions and Clarifications (cont'd)

Ground Water Sampling and Analysis

1). If a ground water temporary point or well must be placed in the excavation, is it necessary to purge the volume of the excavation if the fill below the water table was compacted in one-foot lifts and the fill was of equal or less permeability?

No. Follow up to this with "Backfill" question (slide 72).



General Questions and Clarifications (cont'd)

Ground Water Sampling and Analysis

2). Do we need to formally request a variance regarding not including 1-methylnaphthalene as a target compound in ground water analysis? See 12/11/18 ListServe e-mail.



General Questions and Clarifications (cont'd)

Ground Water Sampling and Analysis

2). Do we need to formally request a variance regarding not including 1-methylnaphthalene as a target compound in ground water analysis? See 12/11/18 ListServe e-mail.

As per the ListServe message, a variance is required. The UHOT Program will process a UHOT submittal without the variance request.



General Questions and Clarifications (cont'd)

Receptor Evaluation

1). Can we merely state that receptor evaluation was not performed as none of the triggers for conducting the receptor evaluation occurred?



General Questions and Clarifications (cont'd)

Receptor Evaluation

1). Can we merely state that receptor evaluation was not performed as none of the triggers for conducting the receptor evaluation occurred?

Yes.



General Questions and Clarifications (cont'd)

Backfill

- 1). Does the compaction in one-foot lifts only apply to under the water table?
- 2). Does the requirement to use fill of "equal or less permeability" only apply to under the water table?



General Questions and Clarifications (cont'd)

Backfill

1). Does the compaction in one-foot lifts only apply to under the water table?

Pursuant to N.J.A.C 7:26-F 3.3(f)2, the whole excavation needs to be backfilled and compacted in one-foot lifts.

2). Does the requirement to use fill of "equal or less permeability" only apply to under the water table?

No.



Additional Questions?

